

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL

**Director's Review and Preliminary Determination of Permit Issuance
for**

**Cyanco Company, LLC.
Winnemucca, Nevada
Humboldt County
April 24, 2012**

Cyanco Company, LLC. (Cyanco) submitted an application for PSD minor revision for Class I Air Quality Operating Permit AP2819-0886.02. The application for minor revision was officially submitted February 9, 2012 to the Nevada Division of Environmental Protection - Bureau of Air Pollution Control (NBAPC). The NBAPC requested and received supplementary information and analyses from Cyanco up to April 12, 2012. The project is located in Humboldt County, Nevada, approximately 7 miles west of Winnemucca, in Section 6, T35N, R37E (MDB&M).

The NDEP-BAPC has reviewed the application for minor revision, and has made a preliminary determination to issue the revised Class I Operating Permit. The Cyanco facility manufactures a concentrated liquid sodium cyanide solution. Waste gases from the production are captured and vented to thermal oxidizers, to destroy cyanide compounds before they are emitted to the atmosphere. The thermal oxidizers also have low oxides of nitrogen burners as part of their design.

The minor modifications consist primarily of refurbishing of a thermal oxidizer for the west plant and increases in the hourly and annual sodium cyanide production rates at both the West and East plants. The facility-wide potential-to-emit (PTE), including emissions from Non-Permit equipment, is given in the table below:

Current emission estimates indicate that the Cyanco plant will continue to be a PSD major stationary source, because the potential-to-emit for NO _x is greater than 100 tons per year.	<i>Facility-Wide Potential to Emit (PTE)</i>		
	Pollutant		TPY
	PM	(Particulate Matter)	22.57
	PM₁₀	(Particulate matter <10 microns in diameter)	22.57
	NO_x	(Oxides of Nitrogen)	191.37
	CO	(Carbon monoxide)	81.59
	VOC	(Volatile Organic Compounds)	94.15
	SO₂	(Sulfur Dioxide)	0.14
	Pb	(Lead)	3.19E-4
	HAPs (all)	(Hazardous Air Pollutants)	10.66

The project is located in Air Quality Hydrographic Area (HA) 70 – the Winnemucca Segment of the Humboldt River Basin. The Cyanco facility is an area source of HAPs. The sodium cyanide production plants are not subject to any NSPS standards, which are codified under 40 CFR Part 60. Two reciprocating internal combustion engines are subject to operating limitations under the NESHAP for *Stationary Reciprocating Internal Combustion Engines*, 40 CFR Part 63, Subpart ZZZZ. An existing gasoline storage tank is subject to operating limitations under the NESHAP for *Gasoline Dispensing Facilities*, 40 CFR Part 63, Subpart CCCCC.

Air dispersion modeling conducted by Cyanco and the NBAPC demonstrates that continued operation of the Cyanco plant, after the minor revision, will not violate any applicable ambient air quality standard. Cyanco must comply with all State and Federal air quality requirements and all conditions established within the draft revised Class I Air Quality Operating Permit.